Self-Approval Thresholds for NFPA 805 –NRC Staff Comments

- Per RG 1.205, the maximum total risk increase above the compliant NFPA 805 plant is 2 times the RG 1.174 risk increase guidelines (1X guidelines for transition, 1X guidelines for post transition).
- Per NFPA 805 2.4.4.1 Risk Acceptance Criteria, the cumulative effect of all differences between the deterministic requirements and the proposed FPP changes shall be evaluated and meet the change in risk criteria acceptable to the staff.
 - Some individual FPP changes have no more than a minimal risk impact and therefore need no quantitative risk evaluation.
 - For individual FPP changes that have more than a minimal risk impact , staff allows self-approval if quantitative impact is $\Delta CDF < 1E-07$; $\Delta LERF < 1E-08$.

Self-Approval Thresholds for NFPA 805 (cont.)

- Per RG 1.205, "the NRC chose risk acceptance criteria low enough to provide reasonable assurance that the effect of [multiple] self-approved changes on the cumulative risk would be acceptable."
- Changes in risk that exceed the self-approval guidelines require:
 - A license amendment request for prior staff approval, and
 - the evaluation of cumulative risk of all previous fire protection program changes since adopting NFPA 805 for comparison with RG 1.174 risk guidelines.
- All proposed changes must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins.

NFPA-805 License Condition Text

 Prior NRC review and approval is not required if the change results in a risk increase less than 1 E-7 /yr. for core damage frequency and less than 1 E-8/yr. for large early release frequency. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the plant change evaluation.